

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Boc. 1450 Alexandria, Vitemia 22313-1450 www.uspto.gov

| APPLICATION NO.                            | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/052,228                                 | 01/18/2002  | Erich Frauendorfer   | 1085-019            | 9083             |
| 7590 08/26/2004                            |             | EXAMINER             |                     |                  |
| Alan B. Clement<br>HEDMAN & COSTIGAN, P.C. |             |                      | SERGENT, RABON A    |                  |
| 1185 Avenue of the Americas                |             |                      | ART UNIT            | PAPER NUMBER     |
| New York, NY 10036                         |             |                      | 1711                |                  |

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)   |  |  |  |  |
|---|--|--|--|--|--|--|
|   | 10/052,228   | FRAUENDORFER ET AL.  |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |  |
|   | Rabon Sergent  | 1711   |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover sheet with the c   | orrespondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply of If NO period for reply is specified above, the maximum statutory period we failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | ely filed s will be considered timely. the mailing date of this communication. |  |  |  |  |
| Status  |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 28 Ma  | ay 2004.   |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  |  |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |  |  |
| closed in accordance with the practice under Ex   | x <i>parte Quayle</i> , 1935 C.D. 11, 45   | 3 O.G. 213.  |  |  |  |  |
| Disposition of Claims   |  |  |  |  |  |  |
| 4)⊠ Claim(s) <u>14-23 and 25-36</u> is/are pending in the application.  |  |  |  |  |  |  |
|   | 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |  |  |  |  |
| 6) Claim(s) <u>14-23 and 25-36</u> is/are rejected.   | ,—   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirement.  |  |  |  |  |  |
| Application Papers  |  |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce   |  | xaminer.   |  |  |  |  |
| Applicant may not request that any objection to the d   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction   |  |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Exa  | miner. Note the attached Office  | Action or form PTO-152.  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |  |
| 12) ☐ Acknowledgment is made of a claim for foreign p a) ☐ All b) ☐ Some * c) ☐ None of:  | priority under 35 U.S.C. § 119(a)-   | (d) or (f).  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |  |  |  |  |
| <ol><li>Copies of the certified copies of the priorit</li></ol>   |  |  |  |  |  |  |
| application from the International Bureau   |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of   | f the certified copies not received  | l.   |  |  |  |  |
|   |  |  |  |  |  |  |
| Mache and a   |  |  |  |  |  |  |
| Attachment(s) )  Notice of References Cited (PTO-892)   | 4\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \   | 2TO 442)   |  |  |  |  |
| Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 4) Interview Summary (F<br>Paper No(s)/Mail Date   | ə  |  |  |  |  |
| ) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/5/03</u> .  | 5) Notice of Informal Par<br>6) Other:   | ent Application (PTO-152)  |  |  |  |  |
| Potent and Trademark Office   | o,   |  |  |  |  |  |

Application/Control Number: 10/052,228

Art Unit: 1711

1. Claims 14-23 and 25-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, within claim 14, the language, "the reaction", lacks antecedent basis. It is unclear what reaction is being referred to.

Secondly, within claim 14, the language, "wherein the amine-N oxide has three residues that comprise no more than 8 carbon atoms", is confusing, because it is unclear if the total number of carbon atoms for all three residues is not to exceed 8.

Thirdly, within claims 14 and 30, the language, "... comprise no more than 8 carbon atoms and optionally heteroatoms selected from the group consisting of nitrogen, oxygen, and/or sulfur", renders the claims indefinite for two reasons. The first reason being that it is improper to specify members of a Markush group in the alternative when the language, "selected from the group consisting of", is used. The second reason being that it is unclear how to interpret the "no more than 8 carbon atoms and optionally heteroatoms" language; the language can be interpreted as stating that no heteroatoms are optionally present.

Fourthly, within claims 14, 17, and 28, the language pertaining to the  $\beta$ -hydrogen atom is confusing, because applicants' language, "the nitrogen atom having a  $\beta$ -hydrogen atom", does not clearly correspond to the specification at page 9, lines 30 and 31. Within the specification, applicants associate the  $\beta$ -hydrogen atom with a hydrocarbon residue.

Fifthly, within claim 15, it is unclear what is meant by "part cyclic structures".

Art Unit: 1711

Lastly, given the limitations of claim 14, it is not clear that the subject matter of claims 15 or 17 further limit the claim. Given the "and/or" language and R groups comprising full or part cyclic structures within claim 15, it is not clear that this language further limits claim 14, wherein the three residues comprise no more than 8 carbon atoms.

2. Claims 33 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Support has only been found for the species, "dibutyltin mercaptite"; it is not clear that support exists for the genus of compounds encompassed by tin mercaptide.

Any inquiry concerning this communication should be directed to Rabon Sergent at telephone number (571) 272-1079.

R. Sergent

August 22, 2004

RABON SERGENT PRIMARY EXAMINER